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INFORMATION DISCLOSURE STATEMENT BY APPLICANT use as many sheets as necessary)			SURE	First Named Inventor	Staven Teig	GENTRAL PAR SE	en i ei
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			ary)	Examiner plante	Stacy A. Whitmore		
Street SP 4		Attorney Docket Number	SPLX POORS				
							

			RELATED U	S PATENT DOCU	MENTS
Examiner Initiaka	Cite No.	U.S. Patrint Document Number	MM-00-YYYY	Name of Patentee or Applicant of Ched Daddown!	Fléinied Application Chia
_HSM&KE	i.	2003/0079/193	12-07-2001	Sloven Tolg et al.	Parent application; present application is a continuation of 2003/07/193.
	2.	2003/0018947	12-07-2001	Stoven Teliglet al.	Application filed on the atme day as the pares application 2003/0079 te3, with the same specification as the present application except for summary and abstract.
	3 :	2002/0147958	10-19-2001	Steven Telg et al.	Parent application per the poeliminary amendment dated 2/19/02.
	2 3 , (2003/0063614	01-04-2002	Sloven Teig et al.	Application with some of the same parent provisional applications and with the same specification as the present application exceptor for summary and abstract.
	. 5.	::dotvobe4559	(m-04-200)2	Stoven Teig et al.	Application with some of the same parent provisional applications and with the same specification as the present application exceptor sunjunary and abstract.
	, 6 .	2003/0053568	01-04-2002	Sleven Taig et al.	Application with some of the same parent provisional applications and with the same provisional application exception are and abstract.
-	7.	2003/0101428 S/N 10/040,915	01-05-2002	Sloven Telg et al.	Continuation of 2005/0079193.
The second se	8.	2903/0101428 5/N;10/040,915	011-05-3/06/2	Steven Teig et al.	This Prolinguary Amendment is submitted as the publication 2003/0101428 does not accurately reflect the daims of S/N 10/040.915.
	·8·	22002/0166105 S/M 10/040,948	01-05-2002	Bleven Telg el al.	Continuation of 2003/0079/193.
ay, go ay shingana araw a malar	10.	2002/0186105 5/N 10/040,948	01-052-003	Steven Telg et at.	This Preliminary Amendment is submitted as: the publication 2002/0168 105 coss not accurately reflect the claims of S/N. 10/040:948.
<u>}</u>	11.	2003/0043827 S/W-10/040,953	01:052:002	Steven Teig et al.	Continuation of 2003/0079193.
	12.	2009/00/3527	01-052-002	Steven Teig et al.	This Preliminary Amendment is submitted as

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Supstitute for journ 1440A/PTO	Application tiumber	19,047,978
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT	First Named Inventor	Steven Teig.
STATEMENT DY APPLICANT	Group Ait Urill	2015
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1	11000-110-1		RELATED	US PATENT DOC	JWEN12
eda varavenov	2.444.444.44	8/N 10/040/953		-	The publication 2003/0043822 deed not accurately reflect the identity of \$/19 110/040 tools.
	13.	2003/0083943 B/N 10/040,954	9:1:05-2002	Surven Yeig at III.	Continuation of 2001/0079193.
	14,	2009/9023943 5/4% 10/040,954	01-05-2002	Suiven Teiglet öt.	This Preliminary Amendment is submitted as the publication 2603/0028843 does not accurately reflect the claims of \$44 10/340,934
	15.	2003/0958042 3/N 10/040,983	01-05-2092	Steven felg at al.	Continuation of SCOR-0079 pg.
**************************************	ļŭ.	2003/0006042 5/IN 10/040,953	04-05-2002	Steven Tolg O(al	This Preliminary Amendment is submitted as the publication 2001/0066042 does not accurately reflect the claims of SM 10/040,906.
	17.	2002/0174/12: S/N 10/040,042	·0.)-:07:2002	Sloven Forgetal	Continuation of 2003/0079193.
	18.	2002/0173412 ENV 10/040,942	01-07-2002	Steven Teig et al.	Usic Prefignitary Amardment is autimated as: the publication 2002/0174412 desired accurately reflect the dates of S/N 10/040.942.
	16	2003/0084844 -SAN 10/041,967	61-07-2002	Steven Telg et al.	Continuation of 2903/0079193.
	ga	27:02/2018(9844 SAN 10/041/207	(01-07-2902	Steven Tely et al.	This Preliminary Amendment is submitted as the publication 2003/00688+4 cases not apparately relied this claims of \$7N 10/040,957
	21.	2002/0198/165 S/N 10/0/15/804	01-13-2002	Staven Teig et al.	Continuation of 2003/0079193.
enchagelet Artistichere	22.	2002/0199165 5/N 10/048;864	01-13-2002	Stayen Tolg et 21.	This Preliminary Amendment is submitted as the publication 2002/0199165 dates not accurately reflect the claims of S/M 10/646,864.
	20.	2003/0066042	:01-13:2002	Steven Teigrat at	Continuation of 2003/0055544 per grationary
	24:	2003/011/5666	01-18-2002	Shiyan Telg	Cuntinuation of 2000/9088844 per preliminary

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	Supplement for the Supplemental	Application Number	19/047,998
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•		·	RELATED	J.S. PATENT DOCL	JMENTS
	25.	2009/059187 8/N 10/047,982	01-14-2002	Steven Tongret at	Confinuation of:2003/0079193.
	26.	2003/05/6187 3/N 10/047-982	01 (14) (0)2	Şiçyan Yeig otal.	This Prehmany Amenomient is submitted as the publication 2003/2006187 thes out accurately reflect the claims of S/N 10/047,989
	27.	2093/00660A4	01-18-2002	Stevion Telgi et al.	Application with some of the same parent provisional applications and with the same parent application expent application expent to summary and abstract.
and months of	28.	\$00\$/00\$60\$45	d1-13-2002	Sloven Toig et al.	Application with some of the same parent provisional applications and with the same application accept for ammary and abstract.
	29.	2002/0,139790	12-08-2000	Steven Teig et et.	Application regarding relators placement declaridings
V. A. A. A. W. B. A. A.	30.	2002/0100007	12-06-2200	Sleven "eig et al.	Parent application; present application is a CIP of 2007/01/00007.
- Variation de la constant de la con	31.	2002/0073390 SM 09/737:219	12-13-2000	Slewin Teig et al.	Application regarding related placement Technology
	32.	6062/0073320 S/N 08/737,210	12-13-2000	Sleven Teig et al.	This Profiminary Amendment is published as the publication 2002/0019390 dans on 37733 2 10 accurately relies the chains of S/N 097737 2 10
	3 3.	Sm 09/737/220	12-19-2000	Sieven Teigrerat.	Application regarding related phatemans Technology
	34.	S/H 109/737,345	12-13-2000	Sieven Telgielja.	Application regarding related placement technology
	35:	\$/11/09/739(460	12-15-2000	Steven Telg et al.	Sontinuation of parent 2002/0100007.
	35.	2005/0124834 \$/N 09/739,550	12-15-2000	Staven Teig et al.	Continuation of parent 2002/0105007.
	:37;	2002/01/24237 5/91/09/730,580	18-15-2000	Streen Tour et al.	This Preliminary Amendment is submitted as the publication 2002/0124231 does not accurationly reflect the claims of S/N 05/709,580.
	135.	\$/12 09/730 680	13-15-2000	Steven Teig et ni.	Continuation of parent 2002/0100907.
Authornes a.e.	:89,	S/N 09/742,171	12-19-2000	Sleven: Toig of al.	Continuation of parent 2002/0100007,
ation the market to be	100	2003/0121015	12:19:2000	Staven Følglet id.	Editionation of parent 2002/01/00/07.

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	1.	53/1/00/7/15,067			1
	- 4i,	2003/0121015 5/N 09/745,067	12-19-2000	Steven Teig et al.	This Preliminary Amendment its submitted as the publication 2003/0121015 does not accurately reflect the claims of S/N 09/745,067.
· • • • • • • • • • • • • • • • • • • •	42	2002/0069397	01-13-2092	Steven Telgrat al.	OIP of parent 2002/0100007.
	43:	2002/0170027	02-20-2002	Steven Teig et al.	CIP of parent 2002/0100007.
	114	2002/0157075	02-20-2002	Steven Teig et al.	CIP of parent 2002/0150007.
	A5.	2003/0086841 5/N 10/329,241	12-23-2002	Stoven Telg et al.	Application regarding related placement technology.
	45.	2003/0085841 SAN 10/329,241	12-23-2092	Sleven Terg et al:	This Reliminary Amendment is submitted as the publication 2303/00083/11 does not accumitely reflect the claims of S/N 10/320;241:

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	2.	Jiang Haretat: "A Timing-Constrained alpsoften for Simultaneous Grobal Fouting of Muliple Nots" ISEE/ACM International Conference on Computer Aided Design - ICCAD - 2000, ISEE/ACM Digest of Feshriftal Papers (CAT: NOLOCHIPTAD), Proceedings of International Conference on Computer Aided Design (ICCAD), San Jose, CA USA, S.O. Nov. 2000, Pages 93-103.	

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	1.	Käsiner R. et al.: "Predictable Routeg" (ISESIACM International Conference on Consider Aided
	1 [Design: ICCAD - 2000. TEEErADM Digest of Technical Papers (CAT: NO:000H37140), Proceedings of
		International Contents on Computer Alfed Design (ICCAD), San Josts, CA, USA, S.U. (44) -2500. Pages 116-113.
	2.	Jiang Hajakat. "A Timing-Considence, algorithm for Simultaneous Global Flouring of Multiple Nets."
	4 ;	IEEE/ACM International Contentings on Computer Aidird Doston ICCAD - 2500. IEEE/ACM Organi of
•		Technical Papers (DAT: 190.00CH37140), Proceedings of International Conference on Computer Aides Design (ICCAD), Eign Jose, CA USA, E.S. Nov. 2000. Papes 99-103.

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				U.S.	PATENT DOCUMENTS	
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	1.	.2001/0009 031	A1	07-(9:2001	Milta et al.:	
	2.	4,593,353		DG-03-1566	Burstein et al.	
	.5,	5,267,176	-	11-30-1993	Antreich et al.:	_11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	4.	5,586,078		10-15-1996	Ding et al.	
	9.	5,618,744		04-06-199?	Suzuid et al.	
	G.	5,635,736		05:03-1997	Funaki erat.	
	7	5,637,920		05-10-1997	Loo	CALL MINISTER
	8.	5,640,327		06-17-1997	Ting	
***	Ġ.	5,798,936		08-25-1988	Chong	
	10:	5,838,580		11-1998	Varadarajan et et.	· ·
**************************************	1:1.	5,980,093		11-09-1999	Simes et al.	
***************************************	12;	5,070,108	-	05-30-2000	Andreev et al.	
-	13.	8,150,193		11-21-2000	Glenn	
	7:4;	6,209,123	B1	03-27-2001	Maziasz el al.	<u>.</u>
	15.	6,219,832	31	04-17-2001	Buztiee	
	16.	6,249,902	э:	QG-19-20 0 1	lgusa et al:	
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: AAAAAAAA	19.	6,367,256		10-23-2001	Chiang et at.	
	20.	6,316,838	Bi	11-13-2001	Ozawa et af.	
	21	6,324,675	81	11-27-2001	Dultaret al.	

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				u.s	PATENT DOCUMENTS	
	28.	6,330,707	1	12-11-2001	Stripomiya et al.	
	23.	6;407;434	61	96-18-2002	Fostokeret al.	
	24	6,415,422	B 1	07-02-2002	Mehiclia et al.	
	25.	5,442,743	B1	.08-27-2002	Sarraizadoh et al.	
	26.	6,448,591	B:1	09-10-2002	Juangling	
-,,,,,,,	27.	6,473,891	8)	10-29-2002	Shively	
	28	8,480,991	B1.	.11-12-2002 .	Chorot al.	
	29,	6,490,713	Б2.	12-03-2002	Measumoto	THE STATE OF THE S
	30:	6,546,540	Bi.	04-06-2063	Igareshi et al.	
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	-40.	Ahuju, R. et al., Paster Algorithms for the Shortest Path Problem, Journal of the Association for Computing Mitchinery: vol. 37: No. 2: April 1990, pp. 213-223.	
	41	Srady, L. et al., Channel Routing on a 60° Grid, extended abstract; pp. 956-931.	7
	43.	Brambilla, A. el et., Statistical Method for the Analysis of Interconnects Delay in Submicrometer Layouts, IEEE, 8/2001, pp. 957-966.	
	43.	Comheis, K., A Method of Measuring Flets Routablity for MCM's: General Area Flouting Problems, 1999, pp. 188-199.	
****	24.	Chon, H. at at., Physical Planning of On-Chip Interconnect Architectures, 2002, IEEE, International Conference, pp. 30-35.	1
har tarah sa kurungan sa sang	45.	Cheng, K., Steiner Problem in Octilinear Reving Model, a Thesis Submitted for the Degree of Master of Science, National University Bingapore, 1995, pp. 1-122.	
	46,	Chang, K. et al., Manhatlan or Nen Manhatlan? A Study of Allemative VUSI Rolding Architecturas, po 47-52, 2000.	
	47.	Chip Mode) with Wiring Cost Map. August 1983, IBM Technical Disclesure Ediletin, vol. 26, iss. 3A; op. 923-933.	
	46.	Cong. J. et al., Efficient Houristics for the Minimum Shortest Path Steiner Amoroscence Problem with. Applications to VLSI Physical Design, Gaderica Design Systems and UCLA Computer Science Designment, pp. 88-95.	
	49.	Cong, J. et al., Performance-Driven Multi-Layer General Flouting for POB/MCM Designs, UCLA Computer Selence Department, 1988, pp. 356-351.	
\$ \$ \$ \$ \$ \$	50,	Enbody, Fl. et al., Near-Optimal n-Layer Chancel Routing, 23° Cesign Autemation Conference, 1986, pp. 708-714.	-
	51.	Fang, S. et al., Constrained Via Miniolization with Practical Considerations for Multi-Layer Vt.SI/PCS Bottling Problems, 28 th ACM/IEEE Design Automation Conference, 1991, pp. 60-85.	
	52.	Hom, Estimation of the Number of Routing Layers and Total Wirelength in a PCS Through Wiring Distribution Analysis, 1995, pp. 1-8.	
i	53:	Hong, X, et al., Performance-Driven Steiner Tree Algerithms for Clobal Routing, 30 th ACM/IEEE Design- Automation Conference, 1993, pp. 177-181.	1

Examiner	Date	
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^{*} EXAMINER: Initial it reterence considered, whether or not citation is in conformance with MPEP 809. Draw line through citation it not in conformance and not considered. Include copy of this form with next communication to applicant. * Applicant's unique citation designation number(optional). * See Kinds Codes of USPTO Patent Documents at www.uspto.org/ or MPEP 901.04. * Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. * Applicant is to place a check mark here if English language Translation is attached.

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		NON PATENT LITERATURE DOCUMENTS
 	54.	Khoo, K. et at., An Efficient Mullilayer MCM Router Based on Four-Via Floriting, 30" ACM/IEEE Design Automotion Conference, 1993, pp. 590-595.
······································	.55.	Lillis, J. et al., Talife-Lookup Methods for improved Pedomance Driven Routing, 1998, pp. 368-373.
and the same of	56.	Eppki; W. et al., A Unified Approach to Layout Wirability, Mathimatical Systems Theory, 1987, pp. 189- 203.
	57.	Locil, E. et al., A Proliminary Study of a Diagonal Chimnel-Berilling Model, Algorithmica, 1989, pp.585- 597.
	58.	Loill, E. stalt; Lenlum Moles in Computer Science, A 4d Channel Router for a Two Layer Diagonal Model, pp. 464-476, July 1988.
iosentum	59,	Naciorio, M. et al., Via Minimization for Gridioss Enyonia, 24" ACM/IEEE Design Automation Conference, 1987, pp. 159-165.
	69.	Based Bodean SAT, 1999, pp. 167-175.
	51.	Ch. J. et al., Constructing Lewer and Upper Sounded Delay Routing Trees Using Linear Programming. 35 th Design Automation Conference, 1996.
	62.	Partitioning Logic on to Graph Structure, IBM Technical Disclosure Bulletin, February 1990, vol. 32, iss. 9A, pp. 469-475
	63.	Phillips, N., Channel Routing by Constraint Logic, Department of Computer Science Southern Illinois University, ACM, 1992.
	64.	Takashima, Y. et al. Roulability of FPGAs with Extremal Switch-Block Structures, IEICE Trens. Fundamentals, vol. 1381-A, No. 5, May 1998, pp. 860-858.
	85.	Thaker, S. et al., Algorithms for a Switch Modele Rouling Problem, 1994, pp. 265-270.
	60.	Theuren, D. et al., HEBO: Hierarchical EMC-constrained routing, 11/1982, IEEE pp 498-472.
	67.	Tseng, H., Timing and Crosstalk Driven Area Roding, pp. 378-381.

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number(optional). *See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-tetter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. *Applicant is to place a check mark here it English language Translation is attached.

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•		NON PATENT LITERATURE DOCUMENTS
		Wang, D., Novel Routing Schemes for IO Layout, Part I: FWo-Leiyer Channel Flouting, 28" ACMAECE Automation Conference, 1991, pp. 49-53.
	69:	Wang, M. et al., Modeling and Minimization of Reguing Congestion, Jan. 2000, IEEE proceedings of ASP-DAC, Asia and South Facilic, pp. 185-180.
***************************************	70.	Wood, G. et al., FPGA Housing and Floutability Estimation Via Socioan Satisfiability, Department of Electrical and Computer Engineering Camegie Mellon University, Pittsburgh, PA, pp. 119-126.
***************************************	74.	2060-2063
	72:	Zhou, R. et al., An Optimal Algorithm for River Flooting with Grosstalk Constraints, 1996.
		Zhpu; H, et al., Global Routing with Crosstalk Constraints, Department of Computer Sciences, University of Texas, 1998, pp. 374-377.
44 80 1 galan (44 45/184 (4 24 4 5	74.	Zhou, Fl. et al., Optimal Fliver Housing with Crosstalk Constraints, ACM Transactions on Design Automation of Electronic Systems, vol. 3, No. 3, July 1988, pp. 496,814.

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	2.	2003/0053 399	Αt	01-02-2009	Igarashi ot al.	
	3.	5,663,891		09402-1997	Baraji et el.	
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	G.	6,125,767		10-03-2000	Ghapman	
	7.	6,226,560	01	05-01-2001	Huma et al.	
	8.	6,5 (9,751	82	02-11-2003	Sriem et al.	
	9.	6,543,043	131	04-01-2003	Wang et al.	

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•	10.	Hu, J. or.al., A Timing-Constrained Algorithm for Bimultaneous Global Roubing of Multiple Nets, IEEE/ACM International Conference of Computer Alded Design. IECAD – 2000. IEEE/ACM Digest of Technical Papers (CAT. NO.00CH37140), Proceedings of International Conference on Computer Aided Design (ICCAD). San Jose, CA. USA, 5-9 Nov. 2000. pp. 99-103.	
The state of the s	4	Kastour, R., et.al, Precidable Routing, IEEE/ACM International Conference on Computer Aided Design. (CICAO L. 2010, IEEE/ACM Divisit of Technical Papers (CAT, NO.000H3714D), Proceedings of	

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Sheet 1 of 1	Attorney Docket/Number SPLX:P0089	

				U.S. PAT	ENT DOCUMENTS	
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	1.:	2003/0121017	A1	05-25-2003	Andreev et al.	
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		NON PATENT LITERATURE DOCUMENTS	
Examiner* Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	τª
	3.	Chen et al., Optimal Algorithms for Bubble Sort Based Non-Manhettan Channel Routing, May 1994, Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions Volume: 13 Issues, pp. 603-609.	

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